HOWTO Install Raptor ICA on Debian Linux

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Indice

1 Introduzione

Questo è un tutorial per gli utenti che vogliono installare un Raptor ICA (client) su una macchina Debian Linux.
In particolare, in questo tutorial, installeremo un Raptor ICA su una macchina Debian Wheezy dotata di uno Shibboleth IdP.

2 Pacchetti richiesti

- ntp
- vim
- java (openjdk o sun-java)
- alien
- wget

3 Installazione

3.1 Scaricare e Installare il Raptor ICA

1. Diventare ROOT sulla macchina prescelta:
   - `sudo su -`

2. Scaricare il pacchetto del Raptor ICA in `/usr/local/src`:
   - `wget -c -nd`
     `http://download.opensuse.org/repositories/home:/rhyssmith:/raptor/SLE_11/noa`
     `rch/raptor-ica-1.2.1-1.1.noarch.rpm -O /usr/local/src`

3. Convertire il pacchetto RPM in un pacchetto DEB con **alien**:
   - `alien --scripts raptor-ica-1.2.1-1.1.noarch.rpm`

4. Installare il pacchetto DEB creato:
   - `dpkg -i raptor-ica_1.1.2-2.1_all.deb`

3.2 Configurare il Raptor ICA

1. Modificare il file `/etc/init.d/raptorica` aggiungendo i valori in grossetto:

```
1 #!/bin/bash

...

26 if [ -z "$JAVA_HOME" ]; then # if JAVA_HOME is undefined
27 ##
28 ## Added the JAVA_HOME detection, the Debian way --csr2 2012-07-19
29 ##
30 # The first existing directory is used for JAVA_HOME (if JAVA_HOME is not defined
in $DEFAULT)
31 JDK_DIRS="/usr/lib/jvm/java-7-oracle /usr/lib/jvm/java-6-openjdk
/usr/lib/jvm/java-6-sun /usr/lib/jvm/java-1.5.0-sun /usr/lib/j2sdk1.5-sun
/usr/lib/j2sdk1.5-ibm /usr/lib/jvm/java-1.7.0-openjdk-amd64 /usr/lib/jvm/java-1.7.0-
openjdk"
32 # Look for the right JVM to use
33 for jdir in $JDK_DIRS; do
34    if [ -r "$jdir/bin/java" -a -z "${JAVA_HOME}" ]; then
35       JAVA_HOME="$jdir"
36    fi
37 done
38 export JAVA_HOME
39 if [ -z "$JAVA_HOME" ]; then echo Unable to set JAVA_HOME environment variable;
40 exit 1; fi
41 fi

...
```

2. Modificare `/opt/raptor/ica/conf/metadata.xml` con l'hostname della macchina e le informazioni della propria organizzazione.
Ogni altro cambiamento non è richiesto se il proprio Shibboleth IdP usa i percorsi predefiniti dalla sua installazione.

3. Generare la chiave pubblica del Raptor ICA:
   - `cd /opt/raptor/ica/keys`
   - ```
     keytool -genkeypair -alias raptorica -keystore /opt/raptor/ica/keys/raptor-ica.jks -storepass ##PASSWORD-I## -keypass ##PASSWORD-I## -dname "CN=`hostname -f`,ou=Raptor ICA,o=##YOUR-ORG##" -validity 7300 -keyalg RSA -keysize 2048
     ```

     (usare solo una password per entrambi i valori richiesti dal comando)

   - ```
     keytool -export -alias raptorica -keystore /opt/raptor/ica/keys/raptor-ica.jks -storepass ##PASSWORD-I## -file /opt/raptor/ica/keys/raptor-ica-public.crt
     ```

4. Aprire il file `/opt/raptor/ica/conf/event-release.xml` e trovare il "`bean`" chiamato "**endpointRegistry**", trovare la proprietà chiamata "**serviceEndpoint**" e modificare il valore predefinito: https://localhost:8111/MUA/MultiUnitAggregator

   nel seguente valore: **https://#RAPTOR-MUA-FQDN#:8111/MUA/MultiUnitAggregator**

   e modificare il valore "**changeit**" della proprietà "**keyStorePassword**" con lo stesso valore di **##PASSWORD-I##** (la password del Keystore)

5. Importare la chiave pubblica del Raptor MUA dentro al nuovo Keystore del Raptor ICA:
   - `cd /opt/raptor/ica/keys ; rm -f authorised-keys.jks`
   - ```
     keytool -import -keystore authorised-keys.jks -storepass ##PASSWORD-Y## -alias raptormua -file /tmp/raptor-mua-public.crt
     ```
   - `rm /tmp/raptor-mua-public.crt`

6. Aprire il file `/opt/raptor/ica/conf/event-release.xml` e modificare il valore "**changeit**" di "**trustStorePassword**" in **##PASSWORD-Y##**.

7. Riavviare il Raptor ICA:
   - `service raptorica restart`

8. Inviare il "**raptor-ica-public.crt**" al proprio Raptor MUA Server e importarlo nel suo Keystore.

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1   Introduction

This is a tutorial for users that want install a Raptor ICA (client) on a Debian Linux machines.
In this tutorial we install a Raptor ICA on a Debian Wheezy machine with a Shibboleth IdP installed.

2   Packages required

- ntp
- vim
- java (openjdk or sun-java version)
- alien
- wget

3 Installation

3.1 Download and Install the Raptor ICA package

9. Became root user on the machine:
    - `sudo su -`

10. Download the package of the Raptor ICA:
    - `wget -c -nd`
      `http://download.opensuse.org/repositories/home:/rhyssmith:/raptor/SLE_11/noa`
      `rch/raptor-ica-1.2.1-1.1.noarch.rpm -O /usr/local/src`

11. Convert the RPM package to DEB package with alien:
    - `alien --scripts raptor-ica-1.2.1-1.1.noarch.rpm`

12. Install the DEB package created:
    - `dpkg -i raptor-ica_1.1.2-2.1_all.deb`

3.2 Configure Raptor ICA

1. Modify the `/etc/init.d/raptorica` file by adding the **bold** value:

```
1 #!/bin/bash

...

26 if [ -z "$JAVA_HOME" ]; then # if JAVA_HOME is undefined
27 ##
28 ## Added the JAVA_HOME detection, the Debian way --csr2 2012-07-19
29 ##
30 # The first existing directory is used for JAVA_HOME (if JAVA_HOME is not defined
in $DEFAULT)
31 JDK_DIRS="/usr/lib/jvm/java-7-oracle /usr/lib/jvm/java-6-openjdk
/usr/lib/jvm/java-6-sun /usr/lib/jvm/java-1.5.0-sun /usr/lib/j2sdk1.5-sun
/usr/lib/j2sdk1.5-ibm /usr/lib/jvm/java-1.7.0-openjdk-amd64 /usr/lib/jvm/java-1.7.0-
openjdk"
32 # Look for the right JVM to use
33 for jdir in $JDK_DIRS; do
34    if [ -r "$jdir/bin/java" -a -z "${JAVA_HOME}" ]; then
35        JAVA_HOME="$jdir"
36    fi
37 done
38 export JAVA_HOME
39 if [ -z "$JAVA_HOME" ]; then echo Unable to set JAVA_HOME environment variable;
40 exit 1; fi
41 fi

...
```

2. Modify the fields of `/opt/raptor/ica/conf/metadata.xml` with the Hostname of the VM that hosts a Shibboleth IdP and with the Organization Informations. Any other changes are not requested if the Shibboleth IdP is installed into his default installation path

3. Generate the Raptor ICA Public Key:
   - ```
     cd /opt/raptor/ica/keys
     ```
   - ```
     keytool -genkeypair -alias raptorica -keystore /opt/raptor/ica/keys/raptor-
     ica.jks -storepass ##PASSWORD-I## -keypass ##PASSWORD-I## -dname
     "CN=`hostname -f`,ou=Raptor ICA,o=##YOUR-ORG##" -validity 7300 -keyalg RSA
     -keysize 2048
     ```

     (use only one password for each value that the command requests)

   - ```
     keytool -export -alias raptorica -keystore /opt/raptor/ica/keys/raptor-
     ica.jks -storepass ##PASSWORD-I## -file /opt/raptor/ica/keys/raptor-ica-
     public.crt
     ```

4. Open the `/opt/raptor/ica/conf/event-release.xml` file and find the **bean** labelled "**endpointRegistry**". Find the property labelled "**serviceEndpoint**".
   The default value of this will be: https://localhost:8111/MUA/MultiUnitAggregator

   This should be changed to:**https://#RAPTOR-MUA-FQDN#:8111/MUA/MultiUnitAggregator**

   and modify the value "**changeit**" for property "**keyStorePassword**" at the same value of **##PASSWORD-I##** (the Keystore password)

5. Import Certificate of IDEM Raptor MUA into Raptor ICA Keystore:
   - ```
     cd /opt/raptor/ica/keys ; rm -f /opt/raptor/ica/keys/authorised-keys.jks
     ```
   - ```
     keytool -import -keystore authorised-keys.jks -storepass ##PASSWORD-Y##
     -alias raptormua -file /tmp/raptor-mua-public.crt
     ```
   - ```
     rm /tmp/raptor-mua-public.crt
     ```

6. Open the file `/opt/raptor/ica/conf/event-release.xml` and change the value "**changeit**" of the field "**trustStorePassword**" into **##PASSWORD-Y##**.

7. Restart the Raptor ICA:
   - ```
     service raptorica restart
     ```

8. Send your "**raptor-ica-public.crt**" to your Raptor MUA server and import it to its Keystore.